

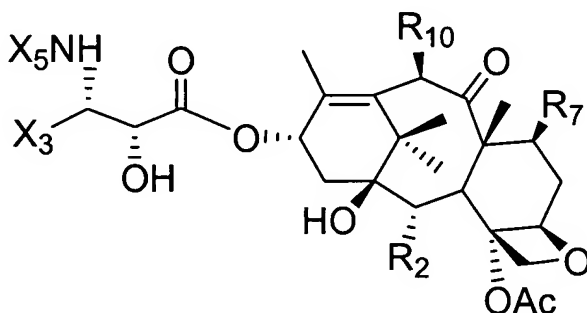
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## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in this application.

### Listing of Claims:

1. (currently amended) A method of inhibiting tumor growth in a mammal, said method comprising administering a therapeutically effective amount of a composition comprising at least one pharmaceutically acceptable carrier and a taxane having the formula



wherein

X<sub>3</sub> is 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, isopropyl, isobutenyl, cyclopropyl, cyclobutyl or cyclopentyl;

X<sub>5</sub> is -COX<sub>10</sub> and X<sub>10</sub> is 2-furyl, 2-thienyl, 3-pyridyl, 4-pyridyl, n-propyl, isobutyl, or butenyl ~~or isobutenyl~~ or X<sub>5</sub> is -COOX<sub>10</sub> and X<sub>10</sub> is ethyl, n-propyl, isopropyl or isobutyl;

R<sub>2</sub> is benzoyloxy;

R<sub>7</sub> is R<sub>7a</sub>COO-;

R<sub>10</sub> is hydroxy; and

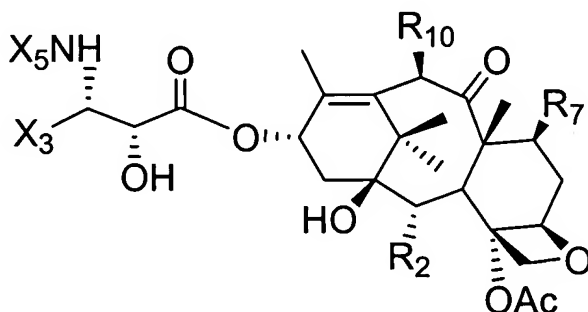
R<sub>7a</sub> is heterosubstituted methyl.

2. (original) The method of claim 1 wherein X<sub>3</sub> is 2-thienyl or 3-thienyl.

3. (original) The method of claim 1 wherein X<sub>3</sub> is 2-furyl or 3-furyl.

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4. (original) The method of claim 1 wherein  $R_{7a}$  is acetoxymethyl, methoxymethyl, phenoxymethyl, ethoxymethyl or methylthiomethyl.
5. (original) The method of claim 4 wherein  $X_3$  is 2-furyl or 3-furyl.
6. (original) The method of claim 4 wherein  $X_3$  is 2-thienyl or 3-thienyl.
7. (previously presented) A method of inhibiting tumor growth in a mammal, said method comprising administering a therapeutically effective amount of a composition comprising at least one pharmaceutically acceptable carrier and a taxane having the formula



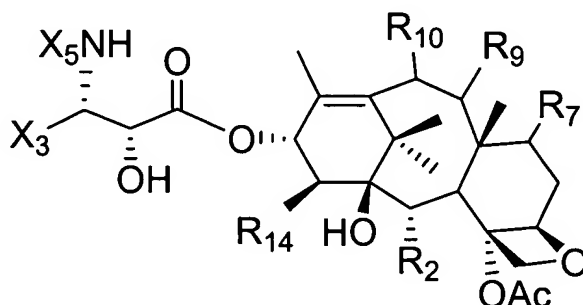
wherein

- $X_3$  is 2-furyl or 2-thienyl;
- $X_5$  is  $-COOX_{10}$  and  $X_{10}$  is t-amyl;
- $R_2$  is benzoyloxy;
- $R_7$  is  $R_{7a}COO^-$ ;
- $R_{10}$  is hydroxy; and
- $R_{7a}$  is methoxymethyl or acetoxymethyl.

8. (original) The method of claim 7 wherein  $R_{7a}$  is methoxymethyl.
9. (original) The method of claim 7 wherein  $X_3$  is 2-furyl.
10. (original) The method of claim 7 wherein  $X_3$  is 2-thienyl.

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11. (original) A method for preparing a pharmaceutical composition comprising mixing at least one nonaqueous, pharmaceutically acceptable solvent and a taxane having the formula



wherein

$R_2$  is acyloxy;

$R_7$  is heterosubstituted acetate;

$R_9$  is keto, hydroxy, or acyloxy;

$R_{10}$  is hydroxy;

$R_{14}$  is hydrido or hydroxy;

$X_3$  is substituted or unsubstituted alkyl, alkenyl, alkynyl or heterocyclo;

$X_5$  is  $-\text{COX}_{10}$ ,  $-\text{COOX}_{10}$ , or  $-\text{CONHX}_{10}$ ;

$X_{10}$  is hydrocarbyl, substituted hydrocarbyl, or heterocyclo; and

Ac is acetyl.

12. (original) The method of claim 11 wherein  $X_3$  is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl or 4-pyridyl,  $C_1 - C_8$  alkyl,  $C_2 - C_8$  alkenyl, or  $C_2 - C_8$  alkynyl.

13. (original) The method of claim 11 wherein  $R_7$  is  $R_{7a}\text{COO}^-$  and  $R_{7a}$  is a heterosubstituted methyl wherein the heteroatom is substituted to form a heterocyclo, alkoxy, alkenoxy, alkynoxy, aryloxy, hydroxy, protected hydroxy, oxy, acyloxy, nitro, amino, amido, thiol, ketal, acetal, ester or ether.

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14. (original) The method of claim 11 wherein  $X_5$  is  $-\text{COX}_{10}$  and  $X_{10}$  is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl,  $C_1 - C_8$  alkyl,  $C_2 - C_8$  alkenyl, or  $C_2 - C_8$  alkynyl, or  $X_5$  is  $-\text{COOX}_{10}$  and  $X_{10}$  is substituted or unsubstituted  $C_1 - C_8$  alkyl,  $C_2 - C_8$  alkenyl, or  $C_2 - C_8$  alkynyl.

15. (original) The method of claim 11 wherein  $X_3$  is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl or 4-pyridyl,  $C_1 - C_8$  alkyl,  $C_2 - C_8$  alkenyl, or  $C_2 - C_8$  alkynyl,  $R_7$  is  $R_{7a}\text{COO}-$  and  $R_{7a}$  is a heterosubstituted methyl wherein the heteroatom is substituted to form a heterocyclo, alkoxy, alkenoxy, alkynoxy, aryloxy, hydroxy, protected hydroxy, oxy, acyloxy, nitro, amino, amido, thiol, ketal, acetal, ester or ether.

16. (original) The method of claim 11 wherein  $X_3$  is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl or 4-pyridyl,  $C_1 - C_8$  alkyl,  $C_2 - C_8$  alkenyl, or  $C_2 - C_8$  alkynyl,  $X_5$  is  $-\text{COX}_{10}$  and  $X_{10}$  is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl,  $C_1 - C_8$  alkyl,  $C_2 - C_8$  alkenyl, or  $C_2 - C_8$  alkynyl, or  $X_5$  is  $-\text{COOX}_{10}$  and  $X_{10}$  is substituted or unsubstituted  $C_1 - C_8$  alkyl,  $C_2 - C_8$  alkenyl, or  $C_2 - C_8$  alkynyl.

17. (original) The method of claim 11 wherein  $R_7$  is  $R_{7a}\text{COO}-$ ,  $R_{7a}$  is a heterosubstituted methyl wherein the heteroatom is substituted to form a heterocyclo, alkoxy, alkenoxy, alkynoxy, aryloxy, hydroxy, protected hydroxy, oxy, acyloxy, nitro, amino, amido, thiol, ketal, acetal, ester or ether,  $X_5$  is  $-\text{COX}_{10}$  and  $X_{10}$  is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl,  $C_1 - C_8$  alkyl,  $C_2 - C_8$  alkenyl, or  $C_2 - C_8$  alkynyl, or  $X_5$  is  $-\text{COOX}_{10}$  and  $X_{10}$  is substituted or unsubstituted  $C_1 - C_8$  alkyl,  $C_2 - C_8$  alkenyl, or  $C_2 - C_8$  alkynyl.

18. (original) The method of claim 11 wherein  $X_3$  is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl,  $C_1 - C_8$  alkyl,  $C_2 - C_8$  alkenyl, or  $C_2 - C_8$  alkynyl,  $R_7$  is  $R_{7a}\text{COO}-$ ,  $R_{7a}$  is a heterosubstituted methyl wherein the heteroatom is substituted to form a heterocyclo, alkoxy, alkenoxy, alkynoxy, aryloxy, hydroxy, protected hydroxy, oxy, acyloxy, nitro, amino, amido, thiol, ketal, acetal, ester or ether,  $X_5$  is  $-\text{COX}_{10}$  and  $X_{10}$

19. (original) The method of claim 13 wherein X<sub>3</sub> is 2-furyl, 3-furyl, 2-thienyl or 3-thienyl.

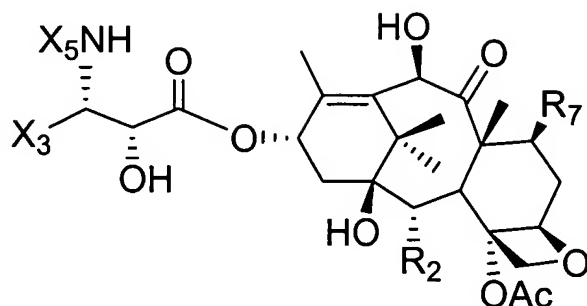
21. (original) The method of claim 19 wherein  $R_7$  is  $R_{7a}COO^-$  and  $R_{7a}$  is a heterosubstituted methyl wherein the heteroatom is substituted to form an alkoxy or acyloxy.

The chemical structure shows a complex bicyclic system, likely a steroid or a similar polycyclic molecule. It features a side chain on the left consisting of a chiral center bonded to an amino group (X<sub>5</sub>NH), a methyl group (X<sub>3</sub>), and a hydroxyl group (OH). This side chain is connected via an ester linkage to the main bicyclic core. The core consists of two fused rings, with various substituents including hydroxyl groups (HO), a carbonyl group (C=O), and a methoxyacetate group (OAc). The stereochemistry is indicated by wedged and dashed bonds, and specific positions are labeled R<sub>2</sub> and R<sub>7</sub>.

$X_5$  is  $-\text{COX}_{10}$  and  $X_{10}$  is isobutenyl.

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wherein

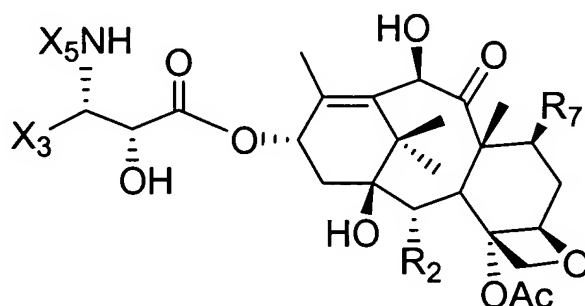
$R_2$  is benzoyloxy;

$R_7$  is  $R_{7a}COO^-$  and  $R_{7a}$  is acetoxymethyl or methoxymethyl;

$X_3$  is 2-furyl; and

$X_5$  is  $-COOX_{10}$  and  $X_{10}$  is t-amyl or t-butyl.

24. (new) A taxane having the formula



wherein

$R_2$  is benzoyloxy;

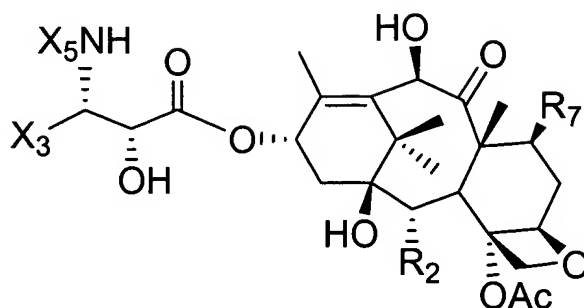
$R_7$  is  $R_{7a}COO^-$  and  $R_{7a}$  is phenyloxymethyl, ethoxymethyl, or methylthiomethyl;

$X_3$  is 2-furyl;

$X_5$  is  $-COOX_{10}$  and  $X_{10}$  is t-butyl.

25. (new) A taxane having the formula

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wherein

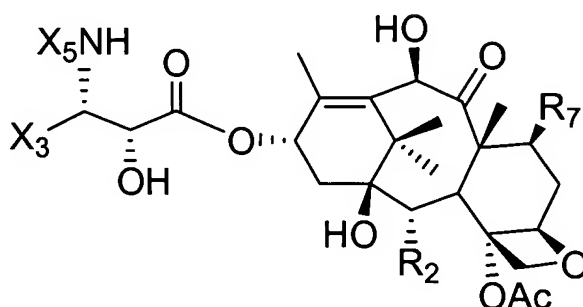
R<sub>2</sub> is benzoyloxy;

R<sub>7</sub> is R<sub>7a</sub>COO<sup>-</sup> and R<sub>7a</sub> is phenyloxymethyl;

X<sub>3</sub> is 2-furyl; and

X<sub>5</sub> is -COX<sub>10</sub> and X<sub>10</sub> is propenyl.

26. (new) A taxane having the formula



wherein

R<sub>2</sub> is benzoyloxy;

R<sub>7</sub> is R<sub>7a</sub>COO<sup>-</sup> and R<sub>7a</sub> is methoxymethyl or phenyloxymethyl;

X<sub>3</sub> is 2-furyl; and

X<sub>5</sub> is -COX<sub>10</sub> and X<sub>10</sub> trans-propenyl.